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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/724,705	12/02/2003	Kamyar Ghandi	10722-007002	1965
26171 7	590 05/24/2004		EXAMINER	
FISH & RICHARDSON P.C. 1425 K STREET, N.W.			DOUGHERTY, THOMAS M	
11TH FLOOR			ART UNIT	PAPER NUMBER
WASHINGTO	N, DC 20005-3500		2834	
•	•		DATE MAILED: 05/24/2004	· · · · · · · · · · · · · · · · · · ·

Please find below and/or attached an Office communication concerning this application or proceeding.

	Δr	plication No.	Applicant(s)	<i>(</i> /\
Office Action Summar	n/	0/724,705 caminer	GHANDI ET AL.	<del></del>
	-^		Art Unit	1
The MAILING DATE of this con	In Ingresion appears	omas M. Dougherty	2834	
A SHORTENED STATUTORY PERIOD THE MAILING DATE OF THIS COMMON - Extensions of time may be available under the proposition of the state o	DD FOR REPLY IS MUNICATION. visions of 37 CFR 1.136(a). s communication. hirty (30) days, a reply withir turn statutory period will appring reply will; by statute, cause on this after the mailing date of 4(b).	SET TO EXPIRE 3 M  In no event, however, may a r in the statutory minimum of thirt bly and will expire SIX (6) MON the the application to become AB of this communication, even if	PONTH(S) FROM reply be timely filed by (30) days will be considered time	
1) Responsive to communication(s				
2a) This action is <b>FINAL</b> .	2b)⊠ This action			
3) Since this application is in cond	ition for allowance e	except for formal matte	ers, prosecution as to the	e merits is
closed in accordance with the p	ractice under <i>Ex pai</i>	rte Quayle, 1935 C.D.	. 11, 453 O.G. 213.	
Disposition of Claims		•		
4)⊠ Claim(s) <u>1-10</u> is/are pending in t	he application			
4a) Of the above claim(s)		om consideration		
5) Claim(s) is/are allowed.	io, are with a ray of the	on consideration.		
6)⊠ Claim(s) <u>1-9</u> is/are rejected.				•
7)⊠ Claim(s) <u>10</u> is/are objected to.				
8) Claim(s) are subject to re	striction and/or elec	tion requirement		
		Mon requirement.		
Application Papers				
9) The specification is objected to b 10) The drawing(s) filed on <u>02 Decemon</u> Applicant may not request that any of Replacement drawing sheet(s) inclu 11) The oath or declaration is objected	nber 2003 is/are: a) objection to the drawinding the correction is i	ng(s) be held in abeyand required if the drawing(s	ce. See 37 CFR 1.85(a).	R 1.121(d)
Priority under 35 U.S.C. § 119		•		·
12) Acknowledgment is made of a cla a) All b) Some * c) None o	im for foreign priorit f:	ty under 35 U.S.C. §	119(a)-(d) or (f).	
1. Certified copies of the prior		e been received		
2. Certified copies of the prior			plication No	
3. Copies of the certified copi	es of the priority do	cuments have been re	eceived in this National S	Stane
application from the Interna	ational Bureau (PCT	Rule 17.2(a)).		ray <del>c</del>
* See the attached detailed Office ad			eceived	
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Attachment(s)		and the second of the second o		
		4) Intentious Sur	mman/ (DTO 442)	
Attachment(s)  1)   Notice of References Cited (PTO-892)  Notice of Draftsperson's Patent Drawing Review  Notice of Draftsperson's Patent Drawing Review  Notice of Draftsperson's Patement(s) (PTO-1448	v (PTO-948)	4) Interview Sur Paper No(s)/I	mmary (PTO-413) Mail Date	

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#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 4-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. There is no proper antecedent basis for citation of "members" and further this term is not defined as to clearly establish what it represents. The description of "each transducer defines a coupler" in claim 4 is confusing. Claim 3 notes a "member coupling" but this member couples the transducers and the additional citing of the "coupler" in claim 4 that is distinct from that of claim 3 is confusing. Thus in claim 5 it is not known which coupler is referred to, either the "transducer [which] defines a coupler" of claim 4, or the "member coupling". Claims 5-7 depend on claim 4.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 8 and 9 (as best understood) are rejected under 35 U.S.C. 102(b) as being anticipated by Takahashi et al. Takahashi et al. show (figs. 3, 4 and 13) a method of extracting electrical energy from mechanical motion comprising: reusing an elastic

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portion of energy in a transducer by transferring the elastic portion of energy to another transducer. Note in figure 4 for example that deflection of either 22a or 22b results in deflection of the other.

Takahashi et al. show (fig. 4, 13) an apparatus for extracting electrical energy from mechanical motion, comprising: at least two transducers (22a, 22b) coupled together such that an elastic portion of energy in one transduc3er is transferable to the other transducer.

A member (e.g. screw 27) couples the transducers.

The transducers (22a, 22b) are coupled to a plate (26).

The plate (26) is positioned between members (22a, 22b) such that the plate (26) is deformed.

## Allowable Subject Matter

Claims 4-7 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art fails to show or fairly suggest a waved-surface coupling member between transducer members and in contact with them and positioned so as to be moved relatively to them for extraction of electrical energy.

### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The remaining prior art cited reads on at least some claimed aspects of the invention.

Direct inquiry concerning this action to Examiner Dougherty at (571) 272-2022.

May 17, 2004

THOMAS M. DOUGHEP?

**GROUP 2100**